Who Pays? An Analysis of the Allocation of the Costs of Canceled Nuclear Power Plants After *Duquesne Light Co. v. Barasch*

I. Introduction

Since the beginning of the 1980s, the cancellation of major nuclear power plant construction projects has become an American reality. Abandonment costs of large construction projects totaled $8.9 billion in 1983, with each abandoned project exceeding $50 million in construction costs.[1] "Over one hundred nuclear units have been canceled," and future expected cancellation costs are estimated to involve an additional five to eight billion dollars.[2] "A typical new [nuclear] plant completed in 1985 cost between three and five billion dollars to construct."[3] The high cost of construction, coupled with the high frequency of project cancellation, creates significant current legal issues which severely affect a state's economy. The most highly disputed question in states affected by these cancellations is how to allocate these losses between ratepayers and utility investors.

Generally, the time from the initiation to the completion of the construction of a major generating plant is ten to twelve years,[4] which means that most of the projects currently canceled were commenced in the late 1960s and early 1970s. At that time, electricity demand growth was around seven percent per year and there was a "doubling of need every ten years."[5] Electricity producers used these projections to prepare for a substantial increase in the demand for electricity. As a result, construction of nuclear generating plants was initiated.

However, the expected increase in demand never came. From the mid-1970s to the early 1980s, increases in demand for electricity slowed to around three percent annually.[6] By 1978 no new orders for nuclear power stations were placed by any utility in the United States.[7] Because of intervening historical events—the oil embargo and the public distrust of nuclear generating facilities after the Three Mile Island accident—many utilities reasonably and prudently decided to cancel construction projects already in progress. This led to a major legal debate over which economic group (utility ratepayers or utility investors) was expected to shoulder the burden of the cost of the canceled nuclear generating facilities.

This Note first briefly summarizes how a state's utility ratemaking system works. The effects of amortization of a capital expenditure on the rate paid by a

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1. Energy Information Admin., U.S. Dep't of Energy, Nuclear Plant Cancellations: Causes, Costs, and Consequences 36, table 9 (1983) [hereinafter Nuclear Plant Cancellations].

2. Pierce, *The Regulatory Treatment of Mistakes in Retrospect: Cancelled Plants and Excess Capacity*, 132 U. Pa. L. Rev. 497, 498–99 (1984).

3. E. Gellhorn & R. Pierce, Regulated Industries 118 (1987).

4. *Id.* at 117.

5. Heidel, *Guarding the Future of Electricity*, Pub. Util. Fort., Dec. 6, 1984, at 22.

6. Johnson, *Why Electric Power Growth Will Not Resume*, Pub. Util. Fort., Apr. 14, 1983, at 19, 20.

7. Heidel, *supra* note 5, at 23.

utility's customers will be discussed. Second, this Note discusses the three major approaches used by the various state public regulatory commissions:

1) deny any recovery of the costs of a canceled nuclear plant by a utility;
2) allow full amortization of the construction costs, usually over a ten-year period, but deny a return for the carryover of the unamortized portion of the construction cost; and
3) allow full amortization and a return on the unamortized portion of the cost.

Third, this Note analyzes the policies behind each alternative and demonstrates why the second option is the most fair to both ratepayers and investors.

Next, this Note examines United States Supreme Court decisions which delineate the modern judicially-created test for just rates. A regulatory ratemaking scheme which unjustly or unreasonably undervalues property so that a utility's receipt of rates is too low violates due process rights under the fourteenth amendment as an unconstitutional taking without just compensation.

Finally, this Note discusses the recent United States Supreme Court case of *Duquesne Light Co. v. Barasch*,[8] which demonstrates the current constitutional constraints and policy alternatives. While reaffirming the long-standing end-result test of *Federal Power Commission v. Hope Natural Gas Co.*,[9] the decision left the choice of the economically and politically correct allocation of costs to state legislatures.

II. History

This section will discuss the ratemaking process, the approach used by various state ratemakers, and the constitutional limitations on their decisions. The first subsection illustrates a simplified version of a typical state ratemaking regulatory scheme. The next subsection sets forth the modern approaches used by state utility commissions to allocate the costs of canceled nuclear projects between investors and ratepayers. The final subsection provides an overview of the constitutional doctrine which has emerged in ratemaking cases.

A. *Ratemaking and Amortization*

The standard ratemaking formula is:

$$R = O + (B \times r)$$

where:

R = the utility's allowed revenue requirement;
O = the utility's operating costs;
B = the utility's permitted rate base; and
r = the utility's cost of capital (rate of return).[10]

8. 109 S.Ct. 609 (1989).
9. 320 U.S. 591 (1944).
10. Pierce, *supra* note 2, at 511.

Generally, prudently incurred operating expenses which provide service to utility customers are used in computing operating costs.[11] These expenses are usually taken directly from a utility plant's accounts.[12] A utility's rate base is the value of its capital assets used to produce electricity on which the utility is legislatively permitted an opportunity to earn a return.[13] The rate of return on a utility's capital is set by statute using a complicated formula to ensure that a utility's shareholders are given a fair return on their investments. Rate of return is defined as "the amount a utility is permitted to earn 'over and above operating expenses, depreciation, and taxes, expressed as a percentage of the legally established net valuation of utility property—the rate base.' "[14]

Although the entire ratemaking equation is not as simple as presented here, this basic formula can be used to show the effects of the allocation of the costs of canceled nuclear projects.

Amortization is important to the understanding of the ratemaking process. Amortization is a process in which a capital outlay is recovered in installments by converting the depreciation in value of a capital asset into a current expense, with the entire amount being recouped by the end of the amortization period.[15] Public utilities use amortization to categorize a capital expenditure as an operating expense to include the value of the depreciation of the capital asset into current cost when computing the utility's revenue requirement.[16]

By examining the ratemaking formula, it is apparent how important the classification of the costs of a canceled project is to the utility's final revenue requirement. First, if the plant's costs can be added into the rate base (B), the utility will recover all the abandonment costs plus a return on the investment. The whole burden will be placed on the ratepayers, while the utility's investors will suffer no loss as a result of the cancellation of the nuclear facility. However, this cannot be done at the sole discretion of the public utility. The determination of what is allowed to be included into the rate base usually requires the plant to be *presently* used and useful in producing electricity for its customers.[17] Therefore, the cancellation costs must provide some current benefit to the utility's customers.

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11. Small, *A FERC Electric Rate Primer*, 5 ENERGY L.J. 107, 108 (1984); *see* 64 AM. JUR. 2D *Public Utilities* § 173 (1972 & Supp. 1989).

12. Note, *A New Approach to Allocating Financial Responsibility for Cancelled Nuclear Units*-Consumer's Counsel v. Public Util. Comm'n of Ohio, 13 U. TOL. L. REV. 1469, 1471 (1982).

13. E. GELLHORN & R. PIERCE, *supra* note 3, at 101. There are also many complicated issues involved in the valuation of a utility's rate base, but this Note will only deal with the effects on rate base of adding the costs of canceled construction projects. *See generally* 64 AM. JUR. 2D *Public Utilities* § 138 (1972 & Supp. 1989).

14. Note, *supra* note 12, at 1473. For a thorough discussion of the complicated determination of rate of return, see Small, *supra* note 11, at 131–34. *See generally* 64 AM. JUR. 2D *Public Utilities* §§ 189–206 (1972 & Supp. 1989).

15. Note, *supra* note 12, at 1475.

16. *Id.* "A public utility cannot be expected to sacrifice its property for the public good; hence, the amount to be set aside for depreciation is an expense of the business and must be deducted from the gross return before the amount of net return can be determined." 64 AM. JUR. 2D *Public Utilities* § 178 (1972 & Supp. 1989).

17. *See generally* 64 AM. JUR. 2D *Public Utilities* §§ 135, 139 (1972 & Supp. 1989). For a typical example, see *infra* note 74.

Alternatively, by allowing a utility to amortize the construction costs as operating costs (O), the utility can eventually recover all of the construction costs from ratepayers. Ratepayers will have the burden of paying for the canceled facility, but investors will not receive a return on this portion of their investment, and therefore must bear some of the costs of abandonment. If a utility cannot recover any of the construction costs of a canceled project, either through addition to the rate base or by amortization over a period of years, then the utility's investors will have to shoulder the entire burden.

Through this simple model of the ratemaking process, the possible ramifications of cost allocations are evident. These concepts are central to understanding the approaches taken by various state regulatory commissions.

B. *Current Allocations of Costs of Canceled Nuclear Facilities by State Utility Commissions*

The allocation of abandonment costs used by state commissions and state courts can be classified into three categories: full recovery, no recovery, and partial recovery. These categories are examined with respect to the burdens each system places on ratepayers and investors.[18]

1. *Full Recovery*

Full recovery has been permitted in a few decisions, thereby placing the entire burden of abandonment losses on the ratepayers.[19] This is achieved when the state's public utility commission or legislature allows amortization of the costs of canceled projects and the unamortized portion of the losses to be placed in the rate base.[20] All prudently incurred costs of a utility, whether used and useful to the public or not, will have a guaranteed rate of return. Thus, the public receives no benefit from the canceled plants while the investors get a virtually risk-free investment. As a matter of fairness and equity, this misallocates the costs of canceled projects.

State utility commissions gave several reasons to justify full cost recovery by investors: the finished plant would have solely benefitted the ratepayers; the project was undertaken to fulfill a utility's service obligation; the utility needed to be able to raise capital; and a longer amortization period eased the ratepayers' burden and increased the investors' perception of risk.[21] While these may be legitimate reasons to allow amortization of the construction costs, they do not directly indicate why a return on the unamortized balance is required. Although this approach may be

18. Each of these alternatives has different complex effects on taxpayers, but a discussion of these effects is beyond the scope of this Note. For a good discussion of the tax implications, see NUCLEAR PLANT CANCELLATIONS, *supra* note 1, at 39–48.

19. Wilson, *Ratemaking Treatment Of Abandoned Generating Plant Losses*, 8 WM. MITCHELL L. REV. 343, 356-57 (1982) (Florida, Iowa, and North Carolina have granted full recovery). *See also* NUCLEAR PLANT CANCELLATIONS, *supra* note 1, at 46–48 table 11 (New York has consistently granted full recovery).

20. Wilson, *supra* note 19, at 356–57.

21. NUCLEAR PLANT CANCELLATIONS, *supra* note 1, at 46–47 table 11.

considered a viable alternative, it is not the best choice considering modern constitutional parameters.[22]

2. *No Recovery*

In a minority of cases, no recovery of the construction costs was permitted by the state utility commission.[23] This forces investors to bear the entire cost, while the rates charged to the utility's customers do not change. Reasons given to justify this result were: The plant site was not to be used within four years; stockholders should bear all the losses because the plant will provide no benefits to ratepayers; and ratepayers should not pay for managerial errors.[24] The principal reason for these disallowances is imprudent decisionmaking on the part of the utility,[25] which explains the managerial error rationale. However, these reasons do not explain why recovery of prudently incurred construction costs should be borne solely by utility investors.

Other decisions to place the costs on investors have been based on specific state statutory language disallowing recovery. For example, in *Office of Consumer's Counsel v. Public Utility Commission*,[26] the Ohio Supreme Court disallowed recovery based on the particular Ohio ratemaking statute.[27] The statute did not consider canceled plant expenditures as ordinary operating expenses, therefore amortization was denied.[28] However, in the absence of express statutory language, the non-provision of benefits to customers remains the only legitimate argument for disallowing recovery of the prudently incurred construction costs.

However, even disallowing recovery of the cost of construction may not insulate consumers: "A utility may sometimes collect indirectly, through a higher rate of return on equity, what it was prohibited from collecting through amortization."[29] By increasing the rate of return, a commission is indirectly shifting the costs of the canceled project from investors to consumers. If this happens, it indicates that the allocation of costs only to investors was not a desirable solution. For example, this is what happened after the Cleveland Electric Illuminating Company was denied recovery in *Consumer's Counsel*. The Public Utility Commission of Ohio raised electric rates to offset the increased risks of investment in the utility caused by the disallowance of recovery of the construction costs.[30] This causes the same end result to ratepayers as requiring the utility's ratepayers to bear some portion of the cost of a canceled facility through amortization.

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22. For a discussion of the relevant constitutional limitations, see section IV of this Note and accompanying material.

23. Wilson, *supra* note 19, at 356–57.

24. NUCLEAR PLANT CANCELLATIONS, *supra* note 1, at 46–47 table 11.

25. Wilson, *supra* note 19, at 357.

26. 67 Ohio St. 2d 153, 423 N.E.2d 820 (1981), *appeal dismissed*, 455 U.S. 914 (1982).

27. *See* OHIO REV. CODE ANN. § 4909.15(a) (Baldwin's 1989).

28. Wilson, *supra* note 19, at 359.

29. Rodgers & Gray, *State Commission Treatment of Nuclear Plant Cancellation Costs*, 13 HOFSTRA L. REV. 443, 466 (1985).

30. *Id.*

3. *Partial Recovery*

By far, the most often used approach is to permit utilities to recover the construction costs through amortization over a period of years, but to deny inclusion of the unamortized portion of the canceled plant in the rate base.[31] Of twenty-one cancellations involving regulatory commission decisions, sixteen were accorded partial recovery, with a ten-year amortization period being chosen most frequently .[32]

With this option, the costs of cancellation are shared; ratepayers reimburse the utility for its construction costs of the abandoned plant over time while investors forego the carrying charges on the unamortized balance.[33] Many reasons have been cited by state commissions supporting this approach. As with full recovery, commissions noted the utility's service obligations to its customers.[34] Other reasons given include: It is "fair and reasonable for a utility to recover legitimate costs associated with long-term debt financing of [a] plant";[35] a longer amortization period is needed to firmly determine all construction costs and to ease the ratepayers' burden; and it is desirable to have "equitable sharing of costs between present and future ratepayers."[36] All these reasons assume that it is desirable to have ratepayers bear the construction costs, yet no explanation is given as to why this is so.

Additional reasons, as will be discussed in section C, have constitutional overtones:[37] a utility needs to be able to raise capital; the permitted rate of return does not compensate investors for the risk of extraordinary losses; the utility could go bankrupt if the entire loss is absorbed by it; and the commission seeks the equitable sharing of the costs between ratepayers and common stockholders.[38]

Another general reason for partial recovery is the realization that denying all cost recovery will have serious negative consequences on the area's taxpayers. Also, deference is given to the commission's own precedents.[39] To justify disallowance of a return on the unamortized portion, most commissions felt no return was earned because the plant will never be used and useful to the public, and that shareholders should bear some of the risk of project failure.[40]

Other policy reasons can be identified to allow at least partial cost recovery. A denial of cost recovery "creat[es] economic disincentives for the utility to commence construction of a large project, and reluctance to cancel a project already begun."[41]

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31. FEDERAL ENERGY REGULATORY COMM'N, 1985 ANNUAL REPORT 36; NUCLEAR PLANT CANCELLATIONS, *supra* note 1, at 41; Rodgers & Gray, *supra* note 29, at 452; Wilson, *supra* note 19, at 352.

32. NUCLEAR PLANT CANCELLATIONS, *supra* note 1, at xv.

33. *Id.* at 41.

34. Federal law now requires a public utility to continue service. *See* 16 U.S.C. § 824(a) (1982) (regulated utility must plan to meet the future needs of its customers). A public utility is now required to use other sources besides natural gas or petroleum as a primary energy source, making costly nuclear plants more desirable. *See* 42 U.S.C. § 8311 (1982).

35. NUCLEAR PLANT CANCELLATIONS, *supra* note 1, at 46–47 table 11.

36. *Id.*

37. *See infra* notes 48–53 and accompanying text.

38. NUCLEAR PLANT CANCELLATIONS, *supra* note 1, at 46–47 table 11.

39. *Id.*

40. *Id.*; *see also* Wilson, *supra* note 19, at 352 ("it is equitable to require investors to assume some of the risks of cancellation by forfeiting the expected return").

41. Gary & Roach, *The Proper Regulatory Treatment of Investment in Cancelled Utility Plants*, 13 HOFSTRA L. REV. 469, 486–87 (1985) (for a list of all decisions allowing partial recovery see *id.* at 491–92 n.149).

A utility which has been denied recovery will be extremely hesitant to start a major long-term construction project, even if there is a consensus that there will be an increased future need for electricity. This could result in serious future shortages of electrical power that would take many years to correct. The West Virginia Utility Commission has identified another policy justification. That Commission found partial recovery to be "a reasonable approach since neither group was responsible for the fate of the project."[42] Because most of the decisions to build new nuclear facilities were prudent in light of the predictions at that time, neither group can be faulted for its actions. Therefore, since neither group is liable for the costs, then the equitable result is to share the burden.

The United States Supreme Court requires an equitable balance between the burdens placed on ratepayers and investors from the cancellation of a major construction project.[43] A U.S. Department of Energy report, assuming equal interest rates for investors and ratepayers and using a ten-year amortization period, found the investors' share to be 28 percent and the ratepayers' share to be 30 percent of the cancellation costs.[44] This is the same amortization period a majority of state commissions select.[45] A ten-year amortization period which distributes the cancellation costs most equally between ratepayers and investors also effectuates the no-fault approach of West Virginia.

Manifestly, the equitable balancing of the costs between investors and ratepayers is, considering the valid economic policies cited by state utility commissions and the constitutional parameters set forth by the United States Supreme Court, the best approach to allocating the costs of canceled nuclear plants, absent a specific statutory mandate otherwise.

C. *Constitutional Parameters: The* Hope *End-Result Test*

In its early opinion of *Smyth v. Ames*,[46] the United States Supreme Court developed the "fair value" test for inclusion of a public utility's costs in its rate base. The fair value test allowed a return by inclusion into the rate base for property used for the convenience of the public.[47] This resulted in a simulated market response in a regulated economy. If an investment was valuable to the utility's provision of service, then it could expect a fair return (profit). But if the investment proved useless, then no return would be permitted.

The fair value test continued to be used until the landmark case of *Federal Power Commission v. Hope Natural Gas Co.*[48] replaced this test with the "end-result" test.[49] In *Hope*, the Supreme Court held that "[i]t is not theory but the impact

42. Virginia Elec. & Power Co., case no. 79-040-E-42T (W. Va. Pub. Serv. Comm'n Feb. 1, 1980) at 4.

43. *See infra* note 52 and accompanying text.

44. NUCLEAR PLANT CANCELLATIONS, *supra* note 1, at 56 table 12 (the rest of the cost will be borne by the income taxpayers).

45. *Id.*

46. 169 U.S. 466 (1898).

47. *Id.* at 546.

48. 320 U.S. 591 (1944).

49. *Id.* at 602.

of the rate order which counts. If the total effect of the rate order cannot be said to be unjust and unreasonable, judicial inquiry . . . is at an end."[50] The Court previously had stated that a public utility commission is not bound to "the service of any single formula or combination of formulas" in determining rates.[51] The Court announced a new balancing test: "the fixing of 'just and reasonable rates' involves a balancing of the investor and the consumer interests."[52] Four investor interests were identified: The need for funds sufficient to cover operating expenses; the maintenance of financial integrity of the utility; the ability to attract capital investors in the future; and compensation of investors for risks commensurate with returns on investments in other enterprises having corresponding risks.[53]

On the other side of the balance, which *Hope* did not expressly identify, are consumer's interests. The *Permian Basin Area Rate Cases*[54] later identified the consumer interests in reasonably priced utility rates and a continued future supply of electrical power. Prior to *Hope*, the Court had held under the end-result test that there is no constitutional guarantee that a utility is entitled to receive net revenues.[55] Under the old fair value test, a utility investor would receive returns on good investments; however, under the *Hope* end-result test, it is the total impact of the rate structure that is considered and not whether a particular investment proved profitable.

According to the *Hope* test, "there is an arguably unconstitutional taking of property when a utility that has made a substantial investment in serving the public interest is denied recovery of its investment from ratepayers."[56] Rates should be set by looking at *all* the capital that was prudently invested by the utility, not just capital that is *used and useful*.[57] A commission's decision not to allow amortization must be supported by the facts of the specific case to ensure protection for the investors' interests. However, disallowing the unamortized portion of the cancellation losses from the rate base is not an unconstitutional taking. This is supported by the traditional view that a rate of return is earned only on property that is used and useful.[58]

Several state court decisions have applied the *Hope* standard. For example, the New Hampshire case of *In Re Public Service Co.*[59] "implies that it is unconstitutional to require the shareholders to bear the entire cost of abandonment."[60] However, the *Hope* test does not go this far. It merely states that as long as a ratemaking scheme is established so that, in the aggregate, a utility will get a just and reasonable return

50. *Id.*
51. Federal Power Comm'n v. Natural Gas Pipeline Co., 315 U.S. 575, 586 (1942).
52. *Hope*, 320 U.S. at 603.
53. *Id.* at 605.
54. 390 U.S. 747 (1968).
55. *Natural Gas Pipeline*, 315 U.S. at 590.
56. Wilson, *supra* note 19, at 360.
57. Drobak, *From Turnpike to Nuclear Power: The Constitutional Limits on Utility Rate Regulation*, 65 B.U.L. REV. 65, 121 (1985).
58. Wilson, *supra* note 19, at 360.
59. 122 N.H. 1062, 454 A.2d 435 (1982).
60. Drobak, *supra* note 57, at 113.

on its capital investment, then it is constitutional.[61] There is no guarantee that the costs of canceled generating facilities will be recovered. Only by looking to the facts of each utility's rate request can the impact on investors be determined.

The Ohio Supreme Court recognized this when it stated in *Dayton Power & Light Co. v. Public Utilities Commission*[62] that "'[t]he Constitution no longer provides any special protection for the utility investor. Regulation . . . can 'limit stringently' the profitability of [an investor's] investment in endeavoring to balance the 'broad public interest entrusted to its protection.' "[63] Hence, a utility's new rates can meet the *Hope* standards even if the rates do not allow for amortization of the lost investment.[64] In essence, the *Hope* test leaves ratemaking to state legislatures and a ratemaking order will only be unconstitutional if the total effect, not just a portion, is found to be unjust or unreasonable.

III. *DUQUESNE LIGHT CO. V. BARASCH*

During the late 1960s, the consensus opinion of public utilities was that there would be substantial and consistent increases in the demand for electricity and steady increases in the price of oil due to an international oil cartel.[65] From 1950 to 1973, the cumulative growth of sales of electricity was approximately eight percent per year.[66] Because of this increased demand for electricity, in 1967 Duquesne Light Company (Duquesne), Pennsylvania Power Company (Penn Power), and three other electric utility companies from Ohio formed the Central Area Power Company (CAPCO).[67] The purpose of CAPCO was to construct jointly seven nuclear power plants.[68] By 1980, intervening events, including the Arab oil embargo and the accident at Three Mile Island nuclear plant, decreased the demand for electricity generated by nuclear power stations.[69] This resulted in the cancellation of four of the nuclear plants before completion, with Duquesne's investment in the canceled plants totaling $34,697,389 and Penn Power's investment totaling $9,569,665.[70] Duquesne filed a request with the Public Utility Commission of Pennsylvania (PUC) to amortize this investment over a ten-year period.[71] In a report to the PUC, an administrative law judge found Duquesne acted prudently in joining CAPCO and acted prudently in cancelling the four nuclear power stations.[72] The PUC approved a rate increase which

61. Federal Power Comm'n v. Hope Natural Gas Co., 320 U.S. 591 (1944).

62. 4 Ohio St. 3d 91, 447 N.E.2d 733 (1983).

63. *Id.* at 99, 447 N.E.2d at 740 (quoting Bernstein, *Utility Rate Regulation: The Little Locomotive that Couldn't*, 1970 WASH. U.L.Q. 223, 260).

64. Drobak, *supra* note 57, at 116.

65. Jersey Cent. Power & Light Co. v. Federal Energy Regulatory Comm'n, 810 F.2d 1168, 1171 (D.C. Cir. 1987).

66. Johnson, *supra* note 6, at 20.

67. Duquesne Light Co. v. Barasch, 109 S. Ct. 609, 612 (1989).

68. *Id.*

69. *Id.* at 613.

70. *Id.*

71. Barasch v. Pennsylvania Pub. Util. Comm'n, 516 Pa. 142, 147, 532 A.2d 325, 327 (1987).

72. *Id.* at 148, 532 A.2d at 327.

included $3.5 million in revenue from the first installment of the ten-year amortization of Duquesne's loss in CAPCO's projects.[73]

During this proceeding, a Pennsylvania statute was passed which restricted inclusion in the rate base of any facility not currently used and useful in service to the public.[74] Pennsylvania's Commonwealth Court consolidated Duquesne's and Penn Power's action and construed the Pennsylvania statute to not exclude amortization.[75] However, the Supreme Court of Pennsylvania disallowed any amortization of the costs of the canceled project by interpreting the statute to exclude all costs of facilities not used and useful.[76] The court held it was not an unconstitutional taking because the "just compensation" safeguard "is a reasonable return on the fair value of its property at the time it is being used for public service."[77] Because the investments in the canceled projects were not serving the public at that time, no constitutional right to recovery attached.[78]

In *Duquesne Light Co. v. Barasch*,[79] the United States Supreme Court held that the Pennsylvania Supreme Court had correctly applied Pennsylvania's ratemaking statute.[80] Pennsylvania's ratemaking methodology was found not confiscatory under the fourteenth amendment, despite the denial of amortization of investments in canceled nuclear projects.[81] The Court correctly applied the *Hope* end-result test by looking at the impact, not the theory, of the rate order. This reaffirms the flexible test set forth in *Hope* which requires balancing of investors' and consumers' interests.

IV. Analysis of the Effects Of *Duquesne Light Co.*

The Court realized in *Duquesne Light Co.* that the used and useful requirement of the Pennsylvania statute harked back to the fair value test first set forth in *Smyth v. Ames*.[82] With the fair value test, utility investments which are never used and useful to the public are not entitled to a return because the investments have no fair value.[83] This test was abandoned as the sole criterion in *Hope*, which adopted the end-result test.[84] The end-result test requires consideration of the entire ratemaking

73. *Duquesne Light Co.*, 109 S. Ct. at 613.

74. 66 Pa. Cons. Stat. Ann., § 1315 (Purdon 1988) ("[T]he cost of construction or expansion of a facility undertaken by a public utility producing, generating, transmitting, distributing, or furnishing electricity shall not be made a part of the rate base nor otherwise included in the rates charged by the electric utility until such time as the facility is used and useful in service to the public . . . . [N]o electric utility property shall be deemed used and useful until it is presently providing actual utility service to the customers.").

75. Cohen v. Pennsylvania Pub. Util. Comm'n, 90 Pa. Commw. 98, 494 A.2d 58 (1985).

76. Barasch v. Pennsylvania Pub. Util. Comm'n, 516 Pa. at 158, 532 A.2d at 332.

77. *Id.* at 163, 532 A.2d at 335.

78. *Duquesne Light Co.*, 109 S. Ct. at 614.

79. 109 S. Ct. 609 (1989).

80. *Id.* Eight Justices voted to affirm with only Justice Blackmun dissenting on jurisdictional grounds. *Id.* at 621.

81. *Id.* at 619.

82. 169 U.S. 466, 547 (1898).

83. *Duquesne Light Co.*, 109 S. Ct. at 616. Pennsylvania adopted a different method for valuing capital. Over time, it became impractical to value large construction projects at their fair market value since no market existed for such items. Therefore, Pennsylvania adopted the "historical basis" or "historical cost" test which amortizes the "cost of the utility's property valued at the time it was first placed in public service." *See infra* note 96.

84. Federal Power Comm'n v. Hope Natural Gas Co., 320 U.S. 591 (1944).

scheme, and not just the use of the specific asset. In this case, while the nuclear generating plants were not used and useful, the Court did not invalidate the ratemaking scheme. The Court correctly analyzed the effect of denying amortization of the construction costs when it ruled that Pennsylvania's ratemaking plan as a whole did not set unjust rates; in fact, the final rate order was within the boundaries of *Hope*.[85]

The Court's analysis focused on the total rate structure to examine the effects of the rate order on the investors' interests. The Court found that even though the costs of the canceled projects were high, the overall effect was a reduction of return for Duquesne of only 0.4 percent and for Penn Power of only 0.5 percent.[86] This reduction had only a limited impact on the financial integrity of the two companies. No evidence was presented that the utilities would have insufficient operating capital or that the company's ability to raise future capital would be inhibited.[87] Additionally, the companies could adequately compensate current equity holders.[88] The Court did not expressly discuss consumers' interests, but a consumer's interest in reasonable rates is always present when utility rates are set. By applying the facts of the case, the Court held Pennsylvania's ratemaking scheme satisfied the end-result parameters set forth in *Hope*.[89]

The Court also expressed the need for consistency in the state's ratemaking scheme. While ratemaking is a state legislative duty[90] and deference should be given to the legislature's choice, inconsistency in risk allocation to investors could result in constitutional problems.[91] The ratemaking methodology partially determines the risks involved in investing in a utility.[92] Constant shifting of the ratemaking methodology will make investors' risks inconsistent and indeterminable, as compared to other similar investments. This is one of the investors' interests that the *Hope* balance protects.

Although concerned with consistency, the Court also recognized the need for flexibility, a seemingly opposite concern. The Court did not adopt the use of "historical cost" as a rigid constitutional rule, but allowed flexibility for state legislatures to choose appropriate rate structures.[93] The Court stated that state legislatures must balance the needs of investors and consumers and create a system which best meets both their needs.[94] These concerns about consistency and flexibility would require state legislatures to make a difficult balance without further judicial guidance. However, the Court did hint at the proper balancing approach by

85. *Duquesne Light Co.*, 109 S. Ct. at 619.

86. *Id.* at 618 (Duquesne's $35 million investment in the canceled plants comprises roughly 1.9% of its total rate base and Penn Power's $9.6 million investment comprises only 2.4% of its rate base).

87. *Id.*

88. *Id.*

89. *Id.*

90. *Id.*

91. *Id.* at 619.

92. *Id.*

93. *See supra* note 83 and accompaning text.

94. *Duquesne Light Co.*, 109 S.Ct. at 620.

emphasizing the need for flexibility, but taking a restricted view as to what constitutes inconsistency in risk allocation.

A major policy behind the *Hope* test is the need for flexibility in setting a ratemaking structure. The emphasis on the end result implies that the specific modes of setting rates are not important in a constitutional sense. A legislature is free to choose its own ratemaking scheme in order to reach what it feels is an equitable balance between investors' and consumers' interests. A state legislature may or may not allow amortization, according to the balance it feels is required, given the political and economic climate of that particular state. The Court's refusal to adopt one single constitutional standard ("historical cost") directly furthers the flexibility policy. Therefore, the choice made by the state legislature is to be given great deference.

The Court also emphasized the need for consistency in the state's ratemaking scheme. Curiously, even though the Court stated that constant shifting of the risk of investment could cause constitutional problems,[95] it did not examine Pennsylvania's ratemaking scheme in detail. Prior to 1982 Pennsylvania used the "historical cost" rule in setting utility rates.[96] Late in 1982 an amendment to Pennsylvania's ratemaking statute was enacted which disallowed inclusion into the rate base, or *otherwise* adding to the rates charged customers, any property not used and useful.[97] This increased the risk for investors because major financial outlays for construction of nuclear facilities were not recoverable under the 1982 amendment. Then in 1985 the Pennsylvania legislature enacted another amendment[98] which allows the PUC "to permit amortized recovery of prudently incurred investment in canceled generating units."[99] This statute returns investors' risks to the pre-1982 level. The 1985 amendment meant investors' expectations concerning recovery of canceled power plant costs changed three times within a three-year period.

However, the Court requires more than just a fluctuation of the return on investment when determining what is an unconstitutional "inconsistency" in state ratemaking. First, the Court distinguishes between shifting the risks between prudent and imprudent investments,[100] and shifting the risk of prudent investments between ratepayers and investors. The Pennsylvania statutory scheme allocated the prudently incurred costs between ratepayers and investors, but did not shift the burden of imprudently incurred costs, which is usually borne solely by investors. However, if the legislature changed the statute to disallow any recovery on a profitable investment, the purpose of investments would be defeated. This inconsistency would

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95. *Id.* at 619.

96. 66 PA. CONS. STAT. ANN., § 1311(b) (Purdon 1988) ("[t]he value of the property of the public utility included in the rate base shall be the original cost of the property when first devoted to the public service less the applicable accrued depreciation . . . .").

97. *Id.* at § 1315. *See supra* note 74 for text of the statute.

98. 66 PA. CONS. STAT. ANN., § 520(c) (Purdon 1988) ("[A]n electric utility may be permitted to recover a return of, but not a return on, prudently incurred costs on any partially completed facility when cancellation is found by the commission to be in the public interest").

99. *Duquesne Light Co.*, 109 S. Ct. at 614 n.3.

100. *Id.* at 619.

be unconstitutional because it would "take" the stockholder's investment without adequate compensation in violation of the fourteenth amendment. This is what the Court meant by "inconsistency."

The Court also appears to indicate that the effects of these statutes were not severe enough to send constitutional signals. The Court indicated that there was no evidence that the "slightly reduced rates"[101] increase the overall risk of investments in utilities. This implies that the change of the investors' risks must be great in order to be considered a constitutional problem.

The correct balance, given this wide range of flexibility, should be set by the state after considering the many economic and political policies involved. State legislatures realize that amortization of costs of canceled projects is a flexible option. The length of the amortization period directly affects the portion of the costs borne by investors and consumers. This gives the legislature, through the state's public utility commission, flexibility in balancing the interests of consumers and investors in each specific case. As stated in the United States Department of Energy's report in 1983: "[S]etting the length of the amortization period provides the regulators with considerable control over the cost allocation between the two groups (investors and consumers)."[102] With all the valid policy justifications, the use of amortization can develop the most equitable and flexible ratemaking system, which has no constitutional defects after *Duquesne Light Co.*

The amortization period directly affects the cost allocation between investors and ratepayers: "The longer the amortization period, the greater will be the portion of the abandonment costs borne by the investors."[103] To illustrate this point, consider amortization periods of two, five, ten, and twenty years. At two years investors pay only a 13 percent share of the costs of the canceled project while consumers must pay a 65 percent share.[104] At five years the investors' share increases to 19 percent and the consumers' share decreases to 49 percent.[105] At ten years investors pay 28 percent while consumers pay 30 percent.[106] And with a twenty-year amortization period, investors have a 38 percent share while the consumers' share drops to only 6 percent.[107] This demonstrates how the length of the amortization period can radically change the allocation of the costs.

V. Conclusion

This nation is facing a major policy decision in allocating the cost of canceled nuclear power plants between investors and ratepayers. The cancellations were not the fault of the utilities, but were rather a consequence of world events of the 1970s and the 1980s. The majority of state utility commissions have correctly chosen to

101. *Id.* at 618.
102. Nuclear Plant Cancellations, *supra* note 1, at 41.
103. *Id.*
104. *Id.* at 56 table 12.
105. *Id.*
106. *Id.*
107. *Id.*

allow amortization of the costs of the projects by the utilities, but to deny a rate of return on the unamortized portions for the investors. This creates an equitable sharing of the costs of the cancellations to society.

Duquesne Light Co. has taught us that the balancing of the interests of investors and consumers is almost totally a legislative choice. The United States Supreme Court refused to adopt a rigid rule in favor of allowing state legislatures the flexibility of setting the most equitable rate structure. The Court will only interfere if the rate order does not compensate a utility for its prudent investments, or if the state's ratemaking scheme is so inconsistent that it causes major shifts in the risks borne by investors.[108]

Equity demands, even if the Constitution does not, that the states allow a partial recovery of the costs of canceled nuclear generating facilities. This will allow the utility to maintain its financial integrity, its current credit rating, and its ability to attract capital in the future. Partial recovery will allow a utility to adequately plan for the future use of its capital for building new facilities if electricity demand projections compel such action. Disallowing recovery would unduly restrict prudent future planning, while a return on the unamortized balance would unfairly guarantee investors a return on an investment which confers no benefit to the utility's customers. It would be unfair to the public to guarantee all returns on any prudent utility investment. Therefore, the best balance that can be struck between investors' and consumers' interests, as required by *Hope* and reaffirmed by *Duquesne Light Co.*, is to allow a utility partial recovery of its prudent investments. The state utility commission can shift the allocation of the costs by establishing a specific amortization period. If a short amortization period is used, then ratepayers will bear a greater portion of the loss. The converse is also true. If the utility commission finds that neither group is responsible, it should require an equitable division of the loss. This can be accomplished by using a ten-year amortization period. No matter what ratemaking scheme a state legislature adopts, it is imperative that state legislatures choose an option that allows utilities to meet adequately the electricity demands of future generations.

David P. Barker

108. *See supra* notes 100–101 and accompanying text.